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TRILLIUM SUBG. *SESSILIUM* RAF. (1830), AN EARLIER NAME FOR *TRILLIUM* SUBG. *PHYLLANTHERUM* (SCHULT. & SCHULT.F.) J.D. FREEMAN (MELANTHIACEAE: PARIDEAE).

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ABSTRACT

Our recent effort to ascertain the first valid place of publication for *Trillium* subg. *Phyllantherum*, now in common use and typified by *T. sessile* L., demonstrated that this name, long attributed to Rafinesque's invalid 1820 publication, was inadvertently validated by J.D. Freeman in 1975. Continued review of Rafinesque names brought to our notice that Rafinesque validly established *Trillium* subg. *Sessilium* in 1830, based on the same type species, *T. sessile*, without any mention of his earlier "name." Accordingly, the 1830 subgeneric name has priority over the long-established name *Trillium* subg. *Phyllantherum*.

We (Reveal & Gandhi 2014: 1) recently reported on the validity of a commonly used subgeneric name for the sessile-flowered species of *Trillium* L. subg. *Phyllantherum*. That name was initially proposed by Rafinesque (1820: 72), who did not provide a description or diagnosis. He circumscribed the subgenus to include three species, *T. sessile* L., *T. petiolatum* Pursh, and *T. tinctorium* Raf., but only provided a French diagnosis for *T. sessile*.

Rafinesque's (1820) invalidly published subgeneric name was first validated as an unranked infrageneric name, *Trillium* [unranked] *Phyllantherum,* by Schultes and Schultes f. (1830: 1497). Unfortunately, that valid name remained essentially unknown. Later, the sessile-flowered trilliums were distinguished by Salisbury (1866: 61) as the genus *Esdra*, typified by *T. sessile*. He did not refer to either Rafinesque (1820) or Schultes and Schultes f. (1830). Subsequently, Nieuwland (1913: 112) proposed *Phyllantherum* at the rank of genus, validating it, albeit as a superfluous name because he cited *Esdra*, Salisbury's earlier generic name, in synonymy. As a consequence, when Freeman (1975: 2) took up "*Trillium* subg. *Phyllanatherum* Raf." (1820) as an accepted name, he inadvertently validated it (see Reveal & Gandhi 2014 for details). Although Freeman did not refer to the basionym, his citations of *Estra* and *T.* subg. *Sessilium* (mistakenly cited as genus "*Sessilium* Raf.") provide the requirements for the validity of his subgeneric name.

We assumed that we resolved the nomenclature and that the hitherto widely used *Trillium* subg. *Phyllantherum* would continue to be the correct name for the taxon. Clearly, we failed to appreciate the nomenclatural chaos that is synonymous with Constantin Samuel Rafinesque (1783–1840).

One possible reason for Freeman's mistake of using "*Trillium* subg. *Phyllanatherum* Raf." (1820) can be attributed to Merrill (1949: 93), who considered *T.* subg. *Phyllanatherum* to have been validly published in 1820. Perhaps this impression was influenced by Fernald (1944: 17–18) who mentioned Rafinesque's *T.* subg. *Sessilium* without actually commenting on its nomenclatural significance. Whatever the reason for the failure, including ourselves for not finding the 1830 name earlier, the majority of the blame can be laid at the feet of Rafinesque for not mentioning his 1820 name in 1830 (p. 97) or in 1840 (p. 132) when he treated *Trillium* in detail. Thus, the relationship between Rafinesque's 1820 and 1830 subgeneric names simply has gone unnoticed by monographers of the genus. It is not, however, clear to us how Freeman mistook *Trillium* subg. *Sessilium* as genus "*Sessilium* Raf."

There is no question that Rafinesque effectively validated, and typified *Trillium* subg. *Sessilium*. Under *Trillium*, he recognized three subgeneric names including *Sessilium*.

> 1. *Sessilium*. Petals erect, anthers adnate, filaments flat, stigmas sessile. *Flowers sessile, erect.* (the Tr. sessile of L.[sic.,)].

Unless the 1830 Rafinesque name is proposed for rejection under provisions in Art. 56 of the *International Code of Nomenclature* (McNeill et al. 2012) and is conserved, the correct name at the rank of subgenus for the sessile-flowered trilliums, a monophyletic group (Kato et al. 1995), is as follows:

Trillium L. subg. ***Sessilium*** Raf., Med. Fl. 2: 97. Jun-Dec 1830. – **TYPE**: *T. sessile* L.

Trillium [unranked] *Phyllantherum* Schult. & Schult.f. in J.J. Roemer., Syst. Veg. 7(2): 1497. Oct-Dec 1830. – **TYPE**: not cited; DESIGNATED TYPE: *T. sessile* L. (vide J.D. Freeman, 1975: 2).

Esdra Salisb., Gen. Pl. 60-61. Apr-Mai 1866. – **TYPE**: *T. sessile* L.

Phyllantherum (Schult. & Schult.f.) Nieuwl., Amer. Midl. Naturalist 3: 112. Jul 1913, nom. superfl. ≡ *Esdra* Salisb.

Trillium subg. *Phyllantherum* (Schult. & Schult.f.) J.D. Freeman, Brittonia 27: 2. 30 Mar 1975, nom. superfl. ≡ *Trillium* subg. *Sessilium* Raf.

Trillium subg. "*Phyllantherum*" Raf., J. Phys. Chim. Hist. Nat. Arts 91: 72. 1820, nom. inval. (as "Jrillium")

Note: For purposes of typification of generic and infrageneric names, Article 10.1 of the *International Code of Nomenclature* mentions the terms "citation" (cited in the protologue of a taxon) and "designation" (= lectotypification). Also, in Art. 9.2 and the glossary, the term "lectotype" is restricted to a specimen or an illustration, not to a name. Accordingly, we choose to use the term "designated type" (instead of "lectotype") to denote the designation of a type for generic and infrageneric names.

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